



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

PPLICATION NO.	1	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,186 01/26/2004		01/26/2004	Toru Tsukada	Q79580	6504
23373	7590	03/24/2006	EXAMINER		INER
SUGHRUI			KIM, CHO	KIM, CHONG HWA	
2100 PENNSYLVANIA AVENUE, N.W. SUITE 800				ART UNIT	PAPER NUMBER
WASHING	TON, DO	20037	3682		

DATE MAILED: 03/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)					
		10/763,186	TSUKADA ET AL.					
	Office Action Summary	Examiner	Art Unit					
		Chong H. Kim	3682					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).								
Status								
1)⊠	Responsive to communication(s) filed on <u>05 Ja</u>	anuary 2006.						
2a)⊠	This action is FINAL . 2b) This action is non-final.							
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Dispositi	on of Claims							
4)⊠	4)⊠ Claim(s) <u>17-47</u> is/are pending in the application.							
	4a) Of the above claim(s) is/are withdrawn from consideration.							
5)	5) Claim(s) is/are allowed.							
	☑ Claim(s) <u>17-47</u> is/are rejected.							
	Claim(s) is/are objected to.							
8)∐	8) Claim(s) are subject to restriction and/or election requirement.							
Applicati	on Papers							
9)☐ The specification is objected to by the Examiner.								
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority u	ınder 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:								
	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No							
	3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).								
* See the attached detailed Office action for a list of the certified copies not received.								
Attachmen								
	e of References Cited (PTO-892)	4) Interview Summary						
3) 🔲 Inform	e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date	Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	atent Application (PTO-152)					

DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 17-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nilsson, U.S. Patent 3,643,521 in view of Yabe et al., U.S. Patent 6,004,039.

Nilsson shows, in Fig. 2, a feed screw device comprising;

- a screw shaft 10;
- a nut member 11 threadably engaging an outer peripheral surface of the screw shaft;
- a lubricant supply device 17, at least a portion 18 of the lubricant supply device contacting the screw shaft;
- a housing member 22 which is secured to the nut member and houses the lubricant supply device, the nut member being positioned outside of the housing member;

wherein the housing member/retaining ring, comprising a cylindrical portion 27 that extends away from the nut member and an end face (the vertical portion of 22) that covers an axial end (the right side end) of the lubricant supply device, is disposed to project from an axial end surface of the nut member and along an outer circumferential surface of the lubricant supply device, the outer circumferential surface extending in a longitudinal direction of the screw shaft and beyond the end face of the nut member;

wherein the portion 18 of the lubricant supply device contacts a threaded groove of the screw shaft;

a means (screw) for securing the housing to the nut member; and

wherein the means for securing comprises a screw/fastener threaded to contact at least a portion of the nut member and into at least a portion of the housing;

but fails to show a side that extends radially inward to cover the axial end portion of the lubricant supply device and the lubricant supply device containing a lubricant.

Yabe et al. shows, in Figs. 1-12, a housing member 2 which is secured to a nut member J and houses a lubricant supply device 1, 4a, and/or 4b containing a lubricant oil (as described in col. 2, lines 52-64), the nut member being positioned outside of the housing member, wherein the housing member includes a side 24 or (25 as shown in Fig. 8) that extends radially inward to cover an axial end portion of the lubricant supply device, the axial end portion of the lubricant supply device faces in the longitudinal direction away from the nut member.

As to the structure of the housing member, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the housing member of Nilsson with the capped housing member as taught by Yabe et al. in order to further protect the lubricant supply device from the separation from the nut member so that the feed screw device would last longer.

As to the lubricant supply device containing a lubricant, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the sealing member of Nilsson with the oil containing lubricant supply device as taught by Yabe et al. in

Application/Control Number: 10/763,186

Art Unit: 3682

order to simplify the recharging of the lubricant so that the cost of maintenance can be reduced.

Page 4

(see Col. 1, Lines 33-38).

Claims 17-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nilsson, 3.

U.S. Patent 3,643,521 in view of JP 9-14452.

Nilsson shows, in Fig. 2, a feed screw device comprising;

a screw shaft 10;

a nut member 11 threadably engaging an outer peripheral surface of the screw shaft;

a lubricant supply device 17, at least a portion 18 of the lubricant supply device

contacting the screw shaft;

a housing member 22 which is secured to the nut member and houses the lubricant supply

device, the nut member being positioned outside of the housing member;

wherein the housing member/retaining ring, comprising a cylindrical portion 27 that

extends away from the nut member and an end face (the vertical portion of 22) that covers an

axial end (the right side end) of the lubricant supply device, is disposed to project from an axial

end surface of the nut member and along an outer circumferential surface of the lubricant supply

device, the outer circumferential surface extending in a longitudinal direction of the screw shaft

and beyond the end face of the nut member;

wherein the portion 18 of the lubricant supply device contacts a threaded groove of the

screw shaft;

a means (screw) for securing the housing to the nut member; and

Art Unit: 3682

wherein the means for securing comprises a screw/fastener threaded to contact at least a portion of the nut member and into at least a portion of the housing;

but fails to show a side that extends radially inward to cover the axial end portion of the lubricant supply device and the lubricant supply device containing a lubricant.

JP 9-14452 shows, in Figs. 1-13, a housing member 2 which is secured to a nut member J and houses a lubricant supply device 1, 4a, and/or 4b containing a lubricant oil (as described in col. 2, lines 52-64 of Yabe et al.), the nut member being positioned outside of the housing member, wherein the housing member includes a side 24 or (25 as shown in Fig. 8) that extends radially inward to cover an axial end portion of the lubricant supply device, the axial end portion of the lubricant supply device faces in the longitudinal direction away from the nut member.

As to the structure of the housing member, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the housing member of Nilsson with the capped housing member as taught by JP 9-14452 in order to further protect the lubricant supply device from the separation from the nut member so that the feed screw device would last longer.

As to the lubricant supply device containing a lubricant, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the sealing member of Nilsson with the oil containing lubricant supply device as taught by JP 9-14452 in order to simplify the recharging of the lubricant so that the cost of maintenance can be reduced. (see Col. 1, Lines 33-38 of Yabe et al.).

Application/Control Number: 10/763,186 Page 6

Art Unit: 3682

Response to Arguments

4. Applicant's arguments/Response filed Jan 5, 2006 have been fully considered but they are not persuasive. The applicant filed a common ownership statement under 35 USC 103(c) to disqualify Yabe reference as a prior art. Such statement does not establish a proper evidence to show the common ownership at the time the invention was made. The statement under the Response states that NSK, Ltd. Owned both Yabe and the present invention application "at the time the former invention was made." Such statement is not equivalent to "at the time the invention was made" as a required statement as discussed in MPEP 706.02(I)(1). Furthermore, even if such statement is properly made, the applicant's statement concerning the common ownership necessitated the same grounds of rejection base on the newly discovered reference JP 9-14452. The interpretation of JP 9-14452 is based on Yabe et al., U.S. Patent 6,004,039 which are essentially the same inventions. If the applicant desires a full translation, such translation would be available. It is reminded that JP 9-14452 is qualified as prior art under 102(a).

Conclusion

5. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 3682

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chong H. Kim whose telephone number is (571) 272-7108. The examiner can normally be reached on Monday - Friday; 6:00 - 2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

chk

March 20, 2006